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			MOE, AUNG SOE	
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			2612	157
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/069,419

Examiner

Applicant(s)

Shigeo Yoshida
Art Unit

Aung Moe

2612



The MAILING DATE of this communication a	appears on the cover sh	eet witi	h the correspondence address
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.	_	3	MONTH(S) FROM
- Extensions of time may be available under the provisions of 37 CFR 1	I.136 (a). In no event, howev	er, may a	reply be timely filed after SIX (6) MONTHS from the
mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a real of the period for reply is specified above, the maximum statutory period. Failure to reply within the set or extended period for reply will, by states and the period for reply will, by states and the period for reply will. By states and the period for reply will, by states and the period for reply will. By states are set of the period for reply will, by states and period for reply will be set of the period for re	od will apply and will expire SI tute, cause the application to	X (6) MON become A	THS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status			
1) $\overline{\mathbb{X}}$ Responsive to communication(s) filed on $\underline{No}$	v 11, 2003		****
2a) ☐ This action is <b>FINAL</b> . 2b) 💢 🗆	This action is non-fina	ıl.	
3) Since this application is in condition for allow closed in accordance with the practice under			·
Disposition of Claims			
4) 💢 Claim(s) <u>1-10 and 30-51</u>			is/are pending in the application.
4a) Of the above, claim(s) 33-51			is/are withdrawn from consideratio
5) Claim(s)			is/are allowed.
6) 💢 Claim(s) 1-4, 7-10, and 30-32			
7) 💢 Claim(s) <u>5 and 6</u>			
			pject to restriction and/or election requirement
Application Papers			,
9) The specification is objected to by the Exam	ni <b>ner.</b>		·
10) The drawing(s) filed on	is/are aD accep	ted or	b) objected to by the Examiner.
Applicant may not request that any objection			
11) $\square$ The proposed drawing correction filed on _		is: al	approved by disapproved by the Examine
If approved, corrected drawings are required i	n reply to this Office ac	ction.	
12)☐ The oath or declaration is objected to by the	e Examiner.		
Priority under 35 U.S.C. §§ 119 and 120			
13) 🗓 Acknowledgement is made of a claim for fo	oreign priority under 3	5 U.S.0	C. § 119(a)-(d) or (f).
a) ☑ All b) ☐ Some* c) ☐ None of:			
1. X Certified copies of the priority docume	ents have been receive	ed.	
2. Certified copies of the priority docume	nts have been receive	ed in A <sub>l</sub>	oplication No
3. Copies of the certified copies of the prapplication from the Internation	nal Bureau (PCT Rule 1	17.2(a)	) <b>.</b>
*See the attached detailed Office action for a li			
14) Acknowledgement is made of a claim for do	•		• •
a) U The translation of the foreign language pro			
15) ☐ Acknowledgement is made of a claim for do	omestic priority under	35 0.8	S.C. §§ 120 and/or 121.
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview S	ummes, ii	PTO-413) Paper No(s)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	_		ent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	6)  Other:		••

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# **DETAILED ACTION**

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# Response to Arguments

1. Applicant's arguments filed 9/29/03 have been fully considered but they are not persuasive.

In page 12 of the remarks, the Applicant stated that "non-elected claims 11-29 were inadvertently indicated as canceled in the previous Amendment filed April 11, 2003 where identifier "WITHDRAWN" should have been used instead, thus, the canceled claims be reinstated as "withdrawn" claims."

In response, it is noted that once claims are canceled they will not be reinstated. In fact, the claims 11-29 are corresponding to the non-elected Species and there is no generic claim in the instant application. However, if the Applicant wishes to keep such claims (11-29) in the instant application, the Examiner will renumber the claims 11-29 to 33 - 51 respectively as presented in the amendment filed on 9/29/03. Nevertheless, such claims (33-51) will be withdrawn from consideration in view of the restriction and/or election as set forth in paper no. 6 (mail on 6/27/02).

Regarding claims 1-10, the Applicant alleged that "amended claim 1 specifically recites a condition relation ship between the photographing mode of the image pickup means and a required storage space of an image memory. Each of claims 9, 10, 30 and 31 has been

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amendment similarly, and Swanson '442 fails to show or suggest this aspect of invention as featured in claims 1, 9, 10, 30 and 31 as amended."

In response, the Examiner respectfully disagrees because Swanson '442 clearly discloses that the automatic selecting of the image signal storage space form the memory (18) is only perform when the storage space occupied by the information is needed for the storage of subsequently acquired information as discussed in col. 6, lines 24+. In other words, the control processor 10 is automatically selecting an image signal when said memory control means (i.e., Fig. 1, the elements' 44 and 46) decides that the photographing is impossible in a photographing mode (i.e., the subsequently acquired photo information by the sensor 12 during the photographing mode) of said image pickup means (12) because amount of said image memory means for the photographing is said photographing mode is not available (i.e., see col. 6, lines 15-68).

Regarding claim 32, claim 32 is rejected in view of the new ground(s) of rejection, however, it is noted that Roberts '219 clearly teaches that the size of the image is stored in the computer readable recording medium along with the photograph mode (i.e., Disk 50 of Fig. 2A), and furthermore, different digital bits 55 (i.e., the bit "00" indicated the size of the image data such that the fifty images are stored therein, and the bit "01" indicated the size of the image data such that twenty-five images are stored therein; see col. 5, lines 20-55) is stored in the recording medium (50) for indicating the size of the image which is photographed in the photograph mode (i.e., Black & White/Color). Further, the computer 20 is capable of discriminating the image

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based on whether the size of the image is large or small just by determining the digital bit 55 of the recording medium (50) so that proper decompression may be executed (i.e., col. 5, lines 50+, col. 9, lines 30+). In view of this, it is cleared that only reason for storing the digital bits 55 for indicating the size of the image as shown in Fig. 2A is to discriminating the image on whether the size if large or small by the computer 20.

In view of the above, the Examiner asserts that claim 32 is obvious over Swanson '442 in view of Roberts '219 for at least the reasons discussed as follow.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35

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U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1, 2, 3, 7-8, 9-10 and 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Swanson et al. (U.S. 5,689,442).

Regarding claim 1, Swanson '442 discloses an electronic apparatus (i.e., noted the camera system 100 as shown in Figs. 1/5) comprising: image pickup means (the CCD video camera 12) for photographing an object and outputting an image signal; memory control means (Figs. 1, the element 44) for allowing said image signal to be stored into image memory means (18/92); and

selecting means for automatically selecting an image signal when said memory control means decides that the photographing is impossible in a photographing mode of said image pickup means (12) because a required amount of said image memory means (18) for the photographing in said photographing mode is not available (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means 18 is not sufficient for recording the image captured by the camera 12 during the photographing mode as claimed; see col. 6, lines 15+ and col. 10, lines 24+);

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communicating means (Figs. 1 and 5, the element 70) for automatically transmitting the image signal stored in said image memory means when a predetermined condition (i.e., when the available space in the data storage device 18 reaches a critically low level; see col. 10, lines 25+) is satisfied so as to enable a new image signal to be stored into said image memory means (col. 7, lines 55+ and col. 10, lines 23+).

Regarding claim 2, Swanson '442 discloses further comprising image selecting means (i.e., see col. 6, lines 18+) for selecting an image signal from said image memory means (18) on the basis of a predetermined selecting condition (i.e., col. 6, lines 20+ and col. 10, lines 23+ of Swanson '442), and wherein said communicating means (i.e., the element 70) transmits said selected image signal (i.e., col. 7, lines 60+ and col. 10, lines 24+ of Swanson '442).

Regarding claim 3, Swanson '442 discloses wherein said predetermined selecting condition is a condition to select an old one of said stored image signals, and further comprising managing means (44/10) for managing photographing times of said image signals for the purpose of said condition (i.e., col. 6, lines 25-65).

Regarding claim 7, Swanson '442 discloses further comprising marking means (i.e., Noted the use of a timer 45) for adding a mark to the image signal which is outputted from said image pickup means (12), and wherein said predetermined selecting condition relates to the presence or absence of said marking (i.e., noted form the col. 6, lines 20+ of Swanson '442 that in order to free-up space in the memory 18, the image stored in the memory 18 may be flagged

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with time data, so that the image presence with older time flags may be selected for transmitting to the remote storage 92).

Regarding claim 8, Swanson '442 discloses wherein said communicating means is wireless communicating means (i.e., col. 10, lines 5+ of Swanson '442).

Regarding claim 9, Swanson '442 discloses an image processing method comprising the steps of:

storing a photographed image signal photographed by image pickup means (12) into image memory means (i.e., Figs. 1 and 5; col. 3, lines 50+);

automatically selecting an image signal when photographing is impossible in a photographing mode of said image pickup means (12) because a required amount of said image memory means (18) for photographing in said photographing mode is not available (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means 18 is not sufficient for recording the image captured by the camera 12 during the photographing mode as claimed; see col. 6, lines 15+ and col. 10, lines 24+); and

automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 6, lines 20+ and col. 7, lines 60+ and col. 10, lines 24+).

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Regarding claim 10, Swanson '442 discloses a computer readable recording medium in which a program to execute a procedure by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said procedure comprises the steps of:

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storing a photographed image signal photographed by image pickup means (12) into image memory means (i.e., col. 6, lines 15+);

automatically selecting an image signal when photographing is impossible in a photographing mode of said image pickup means because a required amount of said image memory means for the photographing in siad photographing mode is not available (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means (18) is not sufficient for recording the image captured by the camera 12 during the photographing mode as claimed; see col. 6, lines 15+ and col. 10, lines 24+); and

automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 6, lines 20+ and col. 7, lines 60+ and col. 10, lines 24+).

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Regarding claim 30, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means (12) in a photographing mode of said image pickup means into image memory means (Fig. 1, col. 6, lines 15+);

detecting a required amount of said image memory means (as shown in Fig. 1 that the data management circuit 44 of the controller 10 is capable of determining the amount of image data stored in the storage means 18; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 30+);

discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected required amount (i.e., as shown in Figs. 1 and 5, that the data management circuit 44 of the controller 10 is capable of discriminating the photographing condition of the camera based on the status of the storage means 18 as detected; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 25+);

automatically selecting an image signal on the basis of a predetermined selecting condition (i.e., when the storage area of the camera is fully loaded is determined; see col. 7, lines 15+ and col. 10, lines 25+) from said image memory means (18) when a result of said discrimination indicates that the photographing is impossible because the required amount is not available in said memory means (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a

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critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means 18 is not sufficient for recording the image captured by the camera 12 during the photographing mode as claimed; see col. 6, lines 15+ and col. 10, lines 24+); and

transmitting said selected image signal (i.e., col. 7, lines 55+ and col. 10, lines 30+).

Regarding claim 31, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means (12) in a photographing mode of said image pickup means (12) into image memory means (Fig. 1, the elements' 18 and 92; see col. 6, lines 15+);

detecting a required amount of said image memory means (as shown in Fig. 1 that the data management circuit 44 of the controller 10 is capable of determining the amount of image data stored in the storage means 18; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 30+);

discriminating whether the photographing by said image pickup means can be performed in said photographing mode (i.e., the subsequent images are captured during the photographing mode; see col. 6, lines 24+) or not on the basis of said detected required amount (i.e., noted that based on the capacity of the storage device 18, the controller 10 is capable of discriminating the capacity of the storage 18 to perform the photographing and storing of the new image data therein; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 25+);

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automatically selecting an image signal on the basis of a predetermined selecting condition (i.e., the storage device 18 is full) from said image memory means (18/92) when a result of said discrimination indicates that the photographing is impossible because the required amount is not available in siad image memory means (i.e., the data management device 44 of the controller 10 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 of the controller 10 must discriminate the photographing condition of the camera on the basis of the detected remaining amount of the storage area in the storage means 18; col. 6, lines 15+ and col. 10, lines 24+); and

processing said selected image signal and supplying the processed image signal to said image memory means (i.e., in order to transmit the selected image signals from the storage device 18 to the remote storage device 92 via a transceiver 70, the selected images must be processed by the control processor 10, e.g., an encryption process by an encryption circuit 72, before supplying to the remote storage 92; see col. 10, lines 25-68).

# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson '442 in view of Sono (U.S. 5,829,044).

Regarding claim 4, it is clear from the teaching of Swanson '442 that the controller (i.e., the control processor 10) is capable of managing the data access frequencies of the stored image signals form the memory means (18) when the image data are either accessed or written from the image memory means (18) for the purpose of selecting or transmitting to the remote storage (92) to free up the image memory space for the new image data to be stored therein (i.e., see col. 6, lines 15+, col. 7, lines 15+ and col. 11, lines 2+).

In addition, although Swanson '442 does not explicitly state that the image data stored in the image memory means is selected for transmitting based on the determination that an accessing frequency of the stored image is small. In other word, the images are not view or use frequently may be selected and transmitted to free up the storage capacity of the image memory means. Such limitations are considered obvious over the teaching of Swanson '442. For example, the sole purpose for transmitting the selected image data form the image memory (18) to the remote storage means (92) is to increase the storage capacity of the image memory means (18) at the camera unit (i.e., see col. 10, lines 25+ of Swanson '442) by removing the age or staleness of the images stored at the storage means (18), thus, it is obvious that if the image

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memory means (18) is mainly occupied with the age or staleness images in which are never accessed for viewing (i.e., less frequency), the image memory means (24) may be hindered to store the new captured image data into the image memory means (24).

In order to overcome the above-mentioned problem, an obvious solution is to remove (i.e., transmit) the less frequently used or access image form the image memory (18) and this is clearly well-known in the art as evidenced by Sono '044. In particular, Sono '044 clearly teaches that it is conventionally well-known in the art to use managing means for managing accessing frequencies of the stored image signals (i.e., see Figs. 2 and 3; col. 5, lines 30+) so that this information may be used to secure the empty area in the storage means by selecting a condition in which an accessing frequency is small from the stored data signals (i.e., col. 7, lines 5-25).

Therefore, having the system of Swanson '442 in which clearly suggested that the selected images stored in the image memory means (18) may be transmitted for freeing up the age or staleness of the image data from the memory space for the new image data to be stored therein (i.e., see col. 6, lines 16+ and col. 7, lines 55+ of Swanson '442) and then given the well-established teaching of Sono '044 for selecting a data with less accessing frequency to secure the empty area in the storage means, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Swanson '442 by providing managing means as taught by Sono '044 to select an image signal in which an access frequency is small (i.e., the image data previously stored in the image memory is least recently accessed) from the stored image signals and this would allow the camera user to take as many pictures as

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desired without worrying about running out of image memory capacity by conveniently securing the empty area in the storage means as suggested by Sono '044.

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson '442 in view of Roberts et al. (U.S. 6,094,219).

Regarding claim 32, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (see Figs. 1; the elements 73, 44 and 18), wherein said program comprises the steps of: storing an image signal photographed by image pickup means into image memory means (i.e., Fig. 1; col. 3, lines 50+).

Furthermore, it is noted that Swanson '442 does not explicitly state the steps of: storing a size of the image which is photographed in the photograph mode; and discriminating the image base don whether the size of the image is large or small as recited in claim 32.

However, it is noted that the above-mentioned claimed limitations are well-known in the art as evidenced by Roberts '219. In particular, Roberts '219 discloses a computer readable recording medium (Fig. 2) in which a program to be executed by the computer (20) has been recorded, wherein said program comprises the steps of: storing a photographing mode (i.e., noted the Format/Mode as shown in Fig. 2A) of a photographing apparatus (i.e., noted the camera of Fig. 2); storing a size of the image which is photographed in said photograph mode (i.e., noted the Resolution data is a size of the image as shown in Fig. 2A; col. 5, lines 20+ of

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Roberts '219); and discriminating the image based on whether the size of the image is large or small (i.e., Fig. 2A & 6B; col. 5, lines 20-68 and col. 9, lines 30+).

In view of this, it would have been obvious to one having been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Swanson '442 as taught by Roberts '219 so that proper decompression may be executed based on the size of the image as suggested by Roberts '219 (i.e., see col. 5,lines 50+ and col. 8, lines 30+ of Roberts '219).

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson '442 in view of Yamagata '106 (U.S. 6,263,106).

Regarding claim 32, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (see Figs. 1; the elements 73, 44 and 18), wherein said program comprises the steps of: storing an image signal photographed by image pickup means into image memory means (i.e., Fig. 1; col. 3, lines 50+).

Furthermore, it is noted that Swanson '442 does not explicitly state the steps of: storing a size of the image which is photographed in the photograph mode; and discriminating the image base don whether the size of the image is large or small as recited in claim 32.

However, it is noted that the above-mentioned claimed limitations are well-known in the art as evidenced by Yamagata '106. In particular, Yamagata '106 discloses a computer readable

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recording medium (Fig. 3) in which a program to be executed by the computer (25) has been recorded, wherein said program comprises the steps of: storing a photographing mode (i.e., noted the compressed/uncompressed modes; col. 4, lines 3+) of a photographing apparatus (i.e., noted the camera of Fig. 2); storing a size of the image which is photographed in said photograph mode (i.e., noted the relative sizes of the image as shown in Fig. 3; col. 5, lines 20+); and discriminating the image based on whether the size of the image is large or small (i.e., noted from Figs. 5-11, the controller 25 is capable of discriminating the sizes of the image base on the amount of the image stored in the memory area).

In view of this, it would have been obvious to one having been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Swanson '442 as taught by Yamagata '106 so that the user may select image data that are inhibited form being compresses based on the discriminating result of the image size as suggested by Yamagata '106 (i.e., see Figs. 3-6 and 12; col. 1, lines 60+).

### Allowable Subject Matter

8. Claims 5 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Aung S. Moe whose telephone number is (703) 306-3021. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber,

can be reach on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the customer service number (703) 306-0377.

A. Moe

November 28, 2003